AMENDMENTS to the CLAIMS

     This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1- 7 (cancelled).

8. (currently amended) A computer-implemented method comprising:

providing by a computer at least one declaration for an attribute to be handled as a real-time attribute associated with but external to a directory structure;

receiving by a computer a directory access protocol request for access to one or more attribute values from [[said]] the associated directory structure;

detecting by a computer in [[said]] the received request a request to access an attribute declared as a real-time external attribute;

responsive to [[said]] the detecting of a request for a real-time attribute, resolving by a computer a real-time value by obtaining an attribute value from a real-time source external to [[said]] the directory structure;

responsive to [[said]] the resolving, converting [[said]] by a computer the obtained attribute value from a real-time attribute to a static attribute, wherein [[said]] the real-time attribute is incompatible with [[said]] the directory access protocol, and wherein [[said]] the static attribute is compatible with [[said]] the directory access protocol; and

returning by a computer to a requester [[said]] the converted real-time attribute directly in [[said]] the directory access protocol, wherein storing and updating of [[said]] the converted real-time attribute value in [[said]] the directory structure is eliminated or avoided.

Claims 9 - 11 (cancelled)

12. (currently amended) The method as set forth in Claim 8 wherein [[said]] the detecting comprises parsing by a computer a Lightweight Directory Access Protocol requests for attribute values.

13. (currently amended) The method as set forth in Claim 8 wherein [[said]] the returning comprises returning [[said]] by a computer the value according to a Lightweight Directory Access Protocol.

Claims 14 - 19 (cancelled).

20. (currently amended) A computer readable ~~storage~~ memory comprising:
a computer readable ~~storage~~ memory suitable for encoding program instructions ~~computer programs~~; and
~~one or more computer programs encoded by said computer readable memory and configured to:~~
first program instructions to provide at least one declaration for an attribute to be handled as a
        real-time attribute associated with but external to a directory structure;
second program instructions to receive a directory access protocol request for access to one or
        more attribute values from [[said]] the associated directory structure;
third program instructions to detect in [[said]] the received request a request to access an
        attribute declared as a real-time external attribute;
fourth program instructions to, responsive to [[said]] the detecting of a request for a real-time
        attribute, resolve a real-time value by obtaining an attribute value from a real-time source
        external to [[said]] the directory structure;
fifth program instructions to, responsive to [[said]] the resolving, converting [[said]] the obtained
        attribute value from a real-time attribute to a static attribute, wherein [[said]] the real-
        time attribute is incompatible with [[said]] the directory access protocol, and wherein
        [[said]] the static attribute is compatible with [[said]] the directory access protocol; and
sixth program instructions to return to a requester [[said]] the converted real-time attribute
        directly in [[said]] the directory access protocol, wherein storing and updating of [[said]]
        the converted real-time attribute value in [[said]] the directory structure is eliminated or
        avoided;
wherein the first, second, third, fourth, fifth and sixth program instructions are stored by the
computer readable storage memory.

21. (currently amended) The computer readable ~~storage~~ memory as set forth in Claim 20
wherein the program instructions to detect ~~said detecting~~ comprises program instructions to parse
~~parsing~~ a Lightweight Directory Access Protocol requests for attribute values.

22. (currently amended) The computer readable ~~storage~~ memory as set forth in Claim 20
wherein [[said]] the returning comprises returning [[said]] the value according to a Lightweight
Directory Access Protocol.

23. (currently amended) A system comprising a hardware means for performing a logical process, wherein [[said]] the logical process comprises:

providing at least one declaration for an attribute to be handled as a real-time attribute associated with but external to a directory structure;

receiving a directory access protocol request for access to one or more attribute values from [[said]] the associated directory structure;

detecting in [[said]] the received request a request to access an attribute declared as a real-time external attribute;

responsive to [[said]] the detecting of a request for a real-time attribute, resolving a real-time value by obtaining an attribute value from a real-time source external to [[said]] the directory structure;

responsive to [[said]] the resolving, converting [[said]] the obtained attribute value from a real-time attribute to a static attribute, wherein [[said]] the real-time attribute is incompatible with [[said]] the directory access protocol, and wherein [[said]] the static attribute is compatible with [[said]] the directory access protocol; and

returning to a requester [[said]] the converted real-time attribute directly in [[said]] the directory access protocol, wherein storing and updated of [[said]] the converted real-time attribute value in [[said]] the directory structure is eliminated or avoided.

24. (currently amended) The system as set forth in Claim 23 wherein [[said]] the hardware means comprises at least in part a microprocessor.

25. (currently amended) The system as set forth in Claim 23 wherein [[said]] the hardware means comprises at least in part an electronic circuit.

26. (currently amended) The system as set forth in Claim 25 wherein [[said]] the electronic circuit is selected from a group consisting of comprising an application specific integrated circuit, and a programmable logic circuit.

27. (currently amended) The system as set forth in Claim 23 wherein [[said]] the detecting comprises parsing a Lightweight Directory Access Protocol requests for attribute values.

28. (currently amended) The system as set forth in Claim 23 wherein [[said]] the returning comprises returning [[said]] the value according to a Lightweight Directory Access Protocol.

29. (currently amended) The method of Claim 8 wherein [[said]] the resolving a real-time value by obtaining an attribute value from a real-time source external to [[said]] the directory structure further comprises selecting according to a predetermined selection schema a real-time attribute processor from a plurality of available real-time attribute processors, invoking [[said]] the selected real-time attribute processor, and wherein [[said]] the resolving is performed by [[said]] the invoked real-time attribute processor.

30. (currently amended) The method of Claim 29 wherein [[said]] the predetermined selection schema comprises a schema employing a variation of a name of [[said]] the requested directory attribute to identify a real-time attribute processor for selection.

31. (currently amended) The computer readable memory of Claim 20 wherein [[said]] the resolving a real-time value by obtaining an attribute value from a real-time source external to [[said]] the directory structure further comprises selecting according to a predetermined selection schema a real-time attribute processor from a plurality of available real-time attribute processors, invoking [[said]] the selected real-time attribute processor, and wherein [[said]] the resolving is performed by [[said]] the invoked real-time attribute processor.

32. (currently amended) The computer readable memory of Claim 31 wherein [[said]] the predetermined selection schema comprises a schema employing a variation of a name of [[said]] the requested directory attribute to identify a real-time attribute processor for selection.

33. (currently amended) The system of Claim 23 wherein [[said]] the logical process resolving a real-time value by obtaining an attribute value from a real-time source external to [[said]] the directory structure further comprises a logical process selecting according to a predetermined selection schema a real-time attribute processor from a plurality of available real-time attribute processors, invoking [[said]] the selected real-time attribute processor, and wherein [[said]] the resolving is performed by [[said]] the invoked real-time attribute processor.

34. (currently amended) The system of Claim 33 wherein [[said]] the predetermined selection schema comprises schema employing a variation of a name of [[said]] the requested directory attribute to identify a real-time attribute processor for selection.